

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matters of)	
)	
International Comparison and Consumer Survey)	GN Docket No. 09-47
Requirements in the Broadband Data)	
Improvement Act)	
)	
A National Broadband Plan for Our Future)	GN Docket No. 09-51
)	
Inquiry Concerning the Deployment of Advanced)	GN Docket No. 09-137
Telecommunications Capability to All Americans)	
in a Reasonable and Timely Fashion, and Possible)	
Steps to Accelerate Such Deployment Pursuant to)	
Section 706 of the Telecommunications Act of)	
1996, as Amended by the Broadband Data)	
Improvement Act)	

**COMMENTS-NBP PUBLIC NOTICE #1
OF QWEST COMMUNICATIONS INTERNATIONAL INC.**

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OF QWEST COMMUNICATIONS INTERNATIONAL INC.**

In these comments, Qwest Communications International Inc. (“Qwest”) responds to the NBP Public Notice #1, issued by the Federal Communications Commission (the “Commission”) in the above-referenced proceedings on August 20, 2009 (hereafter “*First Public Notice*”).¹

I. INTRODUCTION AND SUMMARY

In the First Public Notice, the Commission seeks comment on several issues regarding the general question of how the Commission should define “broadband” for purposes of its development of a National Broadband Plan (“Plan”) pursuant to the American Recovery and Reinvestment Act of 2009 (“Recovery Act”).² In answering this question, the Commission

¹ Public Notice, *Comment Sought on Defining “Broadband”*, NBP Public Notice #1, DA 09-1842, rel. Aug. 20, 2009.

² American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009).

should not seek to redefine what constitutes broadband -- either now or, as some have suggested, on a rolling basis into the future. Rather, it should maintain and clarify the historic definition of broadband and establish different broadband thresholds or categories that can be adjusted as appropriate over time for the different policy contexts at issue in the Plan. In each context, the categories should apply on a technology-neutral basis. In other words, the Commission should not adopt technology-specific categories or technology-specific performance indicators within a category.

The Recovery Act charges the Commission to create a national broadband plan to provide broadband capability to every American and establish clear benchmarks for meeting that goal. This statutory directive encompasses two primary policy goals: deploying broadband to unserved areas and using mapping and data gathering to track progress of broadband deployment.

For data gathering and mapping activities, the Commission should continue to define broadband in its broadest sense, with a tiered definition approach that starts with at least 200 kps in at least one direction and moves up from there to capture all available varieties of broadband. This approach will maximize the availability of comprehensive data.

On the other hand, the Commission should establish two broadband thresholds in the context of facilitating deployment to unserved areas. First, the Commission should define as “unserved” a geographic area without access to Basic Broadband Tier 1 service as defined in FCC Form 477 -- broadband service offering speeds equal to or greater than 768 Kbps but less than 1.5 Mbps in the faster direction. Second, the Commission should establish a minimum threshold in the range of 7 to 10 Mbps as the threshold that must be met for a service to qualify for any new subsidy funding. The Commission could give these categories appropriate labels

such as “unserved broadband threshold” and “qualifying broadband threshold,” respectively. For each of these thresholds, the Commission should include in the definition of these categories, as performance indicators and performance indicator thresholds, the specific standards for latency, jitter and packet loss outlined below. Collectively, these category definitions would strike the right policy balance for these policy contexts, balancing technical, economic and end user usage considerations. But, these thresholds should be periodically reviewed and revised over time to ensure a good balance is always struck based on future developments.

Finally, the Commission should make clear what it is not doing in formulating any of these definitions. For example, it should make clear that it is not, in formulating any of these definitions, applying them for purposes of a product market/substitutability analysis for any future competition analysis or for purposes of determining the regulatory status of a given service or facility. Those issues entail still other policy goals (and legal requirements) that need not be addressed in the Plan and, indeed, should not be.

II. DISCUSSION

A. The Historic Definition Of Broadband Should Be Maintained And Clarified

Broadband has a well-established historic meaning and, in some circumstances, is a term of art from which regulatory consequences follow. The Commission should not seek to redefine broadband now or on a rolling basis in the future based on some subjective conclusions about the adequacy or inadequacy about the robustness of different broadband models. The Commission would be better served by establishing, as discussed in greater detail below, different categories of broadband with defined thresholds that can be adjusted as appropriate over time for the distinct policy contexts at issue in the Plan. At the same time, some clarification around the

Commission's broadband terminology would be helpful. As the Commission has noted,³ Congress and the Commission have used a variety of terms to refer to similar capabilities. Specifically, the Commission has used the terms "advanced telecommunications capability," "advanced services," and "broadband" to describe services and facilities with both an upstream (customer-to-provider) and a downstream (provider-to-customer) transmission speed of more than 200 kbps.⁴ The Commission has also used the term "high-speed" to describe services and facilities with more than 200 kbps capability in at least one direction.⁵ In the *Section 706 Fifth Report*, the Commission also, for the first time, evaluated advanced telecommunications capability by speed tiers, including a "basic broadband tier 1" of services equal to or greater than 768 kbps but less than 1.5 mbps in the faster direction.⁶ The current 477 reporting rules require reporting of broadband deployment using these categories. The *Broadband NOI* and the *Section 706 NOI* both ask whether such terms should have a unified definition in the Section 706 inquiry and the Plan proceedings.⁷ Qwest supports use of a unified definition for these purposes. The best approach would utilize the broadest possible definition when referring to broadband,

³ *In the Matters of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, A National Broadband Plan for Our Future*, GN Docket Nos. 09-137 and 09-51, Notice of Inquiry, FCC 09-65, rel. Aug. 7, 2009 ("Section 706 NOI").

⁴ *In the Matter of a National Broadband Plan for Our Future*, GN Docket No. 09-51, Notice of Inquiry, 24 FCC Rcd 4342, 4346-47 ¶ 16 (2009) ("Broadband NOI"); *Section 706 NOI* ¶ 4.

⁵ *Broadband NOI*, 24 FCC Rcd at 4391-92, Appendix ¶ 14; *Section 706 NOI* ¶ 4.

⁶ *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Fifth Report, 23 FCC Rcd 9615, 9684 (2008), *pet. for recon. pending*, Public Notice, *Pleading Cycle Established for Comments on Petition for Reconsideration of the Commission's Fifth 706 Report*, 23 FCC Rcd 14589 (Sept. 3, 2008).

⁷ *Broadband NOI*, 24 FCC Rcd at 4346-47 ¶ 16; *Section 706 NOI* ¶ 35.

generally (*i.e.*, 200 kbps capability in at least one direction) -- such as for mapping and data gathering, and utilize more specific categories within that broad definition as appropriate in specific policy contexts.

B. The Different Policy Contexts Implicated By The Plan Require Different Broadband Categories

When it comes to defining broadband concepts for purposes of the Plan, it is critical that the Commission recognize that different policy contexts require different broadband thresholds or categories.

The Recovery Act charges the Commission, to create, by February 17, 2010, a national broadband plan for every American to have access to broadband capability and establishes clear benchmarks for meeting that goal.⁸ This directive entails two distinct policy goals. First, the Recovery Act charges the Commission to develop a Plan to accomplish broadband deployment to unserved areas. Second, the Recovery Act directs the Commission to use mapping and data gathering to track the progress of deployment. Each of these distinct policy goals requires the Commission to focus on different categories of broadband.

C. Broadband Categories In Connection With Data Gathering And Mapping

Consistent with the demonstration that all conceivable forms of broadband remain potentially relevant the Commission should, when it come to its data gathering and mapping activities, continue is current approach. That is, it should use a tiered approach that starts with a baseline of downstream or upstream speeds of at least 200 kps in at least one direction and moves up from there to capture all varieties of broadband available. This approach will maximize the underlying policy goals in that context of ensuring the availability of

⁸ Recovery Act, 123 Stat. at 515.

comprehensive data. And, for that context, further performance indicators are not necessary. In the *First Public Notice*, the Commission also asks for comment regarding how modifications over time to the definition will affect the Commission's ability to collect and publish meaningful data on broadband deployment and adoption. As discussed below, the Commission will need to update, over time, the broadband categories definitions it utilizes for broadband in defining unserved areas or establishing what forms of broadband will qualify for subsidy programs for unserved areas. But, the current 477 reporting requirements should not be changed as they will adequately ensure that the Commission receives meaningful data on broadband deployment – even as those categories evolve.

D. Broadband Categories In Connection With Broadband Deployment To Unserved Areas

Clearly, the core policy task for the Commission in developing the Plan is to establish a path to accomplish broadband deployment to unserved areas. The Commission has yet to define what that path will look like. But, judging from the content of the *Broadband NOI*, the huge volume of comments in response to the *Broadband NOI*, and the Commission's broadband workshops, there appears to be universal recognition that the Commission will need to create one or more subsidy programs to defray the excessive costs that currently prevent network operators from reaching unserved areas. Every country in the world that has set out to accomplish this goal has done so, in part, through large subsidy programs and the United States will have to as well.⁹ In addressing this policy context, the Commission should utilize multiple broadband

⁹ See e.g. "International Lessons For Broadband Policy," Presentation at the August 18, 2009 FCC Broadband Policy Workshop, Dr. Robert Atkinson, President Information Technology and Innovation Foundation, p. 13 (documenting that Sweden has invested \$820 million to support deployment to areas with no broadband (on a per-GDP basis, equivalent to \$30 billion in the U.S.), 70% in grants and 30% in tax credits, with 65% of the projects going to incumbent TeliaSonera; that Korea has funded backbone and rural deployment in an amount, on a per-GDP

categories.

Specifically, in the context of a subsidy program to fund deployment to unserved areas, the Commission should define what is “unserved” as an area that does not have access to Basic Broadband Tier 1 service as defined by the Commission for the purpose of Form 477 reporting -- broadband service offering speeds equal to or greater than 768 Kbps but less than 1.5 Mbps in the faster direction. And, the Commission should establish a minimum threshold in the range of 7 to 10 Mbps as the threshold that must be met for a service to qualify for any new subsidy funding. The Commission could give these categories appropriate labels such as “unserved broadband threshold” and “qualifying broadband threshold,” respectively. The Commission should include in the definition of these categories, as performance indicators and performance indicator thresholds, the following standards for latency, jitter and packet loss: the broadband operator should be required to provide the capability to transmit, from the testable points of the server to the customer interface, with less than 150ms one-way latency, less than 30ms jitter, and less than 1% packet loss.¹⁰ This level of latency, jitter and packet requirements will ensure that real-time applications (such as voice over IP or video conferencing) would be adequately supported.

Collectively, these category definitions would strike the right policy balance for these

basis, equivalent to \$4 billion per year for 10 years in the U.S.; and that Japan has funded 1/3 of the costs of fiber networks in unserved rural communities.).

¹⁰ See Tim Szigeti & Christina Hattingh, *Quality of Service Design Overview*, Cisco Press (Dec. 2004)(available at www.ciscopress.com/articles/article.asp?p=357102&rl=1); ITU-T Recommendation G.114 on One-Way Transmission Time (English language version of this document (in pdf format) can be accessed via <http://www.itu.int/rec/T-REC-G.114-200305-I/en>, which is available via the International Telecommunication Union web site at http://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-G.114200305-I!!PDF-E&type=items). See also *ex parte* to Marlene H. Dortch, Federal Communications Commission from Melissa E. Newman, Qwest, CC Docket No. 96-45, filed July 9, 2007 and its attachment, “Qwest’s Proposal For Broadband Deployment To Unserved Areas” (“Qwest White Paper”).

policy contexts. The category definitions should be periodically reviewed to ensure a good balance is always struck based on future developments. The proposed “unserved broadband threshold” reflects the reasonable conclusion that 1.5 Mbps is broadband and easily supports many of today’s potential subscriber uses. At the same time, the “qualifying broadband threshold” reflects the equally reasonable conclusion that the government should only subsidize deployments that attempt to meet future needs for additional bandwidth. This is a balancing act. Qwest’s proposed approach fosters deployment of the best possible product for currently unserved areas – *i.e.*, one that is economically and technologically feasible, where the Commission should obviously not settle for the lowest broadband threshold of 200 kps in at least one direction. At the same time, this approach accounts for the cost hurdles and other practical challenges to deploying for the first time in unserved areas, where the Commission should also not insist upon the most robust form of broadband available regardless of cost.

These category definitions are also consistent with Qwest’s past proposals for revamping the current system of federal universal service support. In July of 2007, Qwest submitted a comprehensive white paper outlining the deficiencies in the current universal service system and detailing a new proposed universal service strategy focused on spurring broadband deployment to unserved areas.¹¹ That proposal, among other things, called upon the Commission to limit federal universal service support for wireless carriers to one collection per household, redirect the resulting savings in universal service funding to subsidize broadband deployment in unserved areas of the country; delegate to the states the role of providing one-time payments (to be set by a competitive bidding process) to subsidize the construction of broadband facilities in unserved areas, and establish a limited pilot program for the buildout of wireless voice services in

¹¹ See Qwest White Paper.

unserved areas.¹² Qwest will continue to be a leader in supporting Commission efforts to revamp and re-orient the current universal service system to channel universal service support toward the effort to bring next generation networks to unserved areas. And, the definitional approach described above will assist in that effort.

E. Any Broadband Definitions/Categories Used In The Plan Should Be Technology Neutral

The Commission asks whether different performance indicators or broadband definitions should be developed based on technological or other distinctions.¹³ It is critical that the Commission, in formulating a definition of broadband in any of these contexts, do so on a technology neutral basis. This will ensure an even playing field and keep the focus where it should be – on end user experience. Nor has any party articulated a credible reason for defining broadband definitions or categories or any underlying performance indicators based on technological distinctions.

F. The Commission Should Be Explicit About Where The Plan's Broadband Definitions And Categories Apply And Where They Do Not

The Commission should also be clear, in formulating any of these new definitions and categories, what it is not doing. For example, it should make clear that it is not, in formulating any of these definitions or categories, applying them for purposes of a product market/substitutability analysis for any future competition analysis or for purposes of determining the regulatory status of a given service or facility. Those issues, which entail still other policy goals (and legal requirements) and may require still different definitions, need not

¹² Qwest White Paper at 26-28.

¹³ *First Public Notice* at 2. The *Section 706 NOI* also asks whether the Commission should define “broadband” to account for different types of transmission technologies. *Section 706 NOI* ¶ 38.

be addressed in the Plan, which, again, should focus on ensuring that every American has access to broadband capability and establishes clear benchmarks for meeting that goal.

Respectfully submitted,

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August 31, 2009

CERTIFICATE OF SERVICE

I, Ross Dino, do hereby certify that I have caused the foregoing **COMMENTS-NBP PUBLIC NOTICE #1 OF QWEST COMMUNICATIONS INTERNATIONAL INC.** to be:
1) filed with the FCC via its Electronic Comment Filing System in GN Docket Nos. 09-47, 09-51 and 09-137; and 2) served via e-mail on the FCC's duplicating contractor, Best Copy and Printing, Inc. at fcc@bcpiweb.com.

/s/Ross Dino

August 31, 2009